

2005年 2月18日 10時29分

(保)ラレ 知的財産部 倉敷

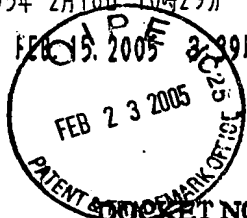
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No. 3995 P. 2

FEB 19 2005 3:39PM

4th FLR.

NO. 701 P. 2



DUCKET NO: 249117US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

HIDEKI KAMADA

SERIAL NO: 10/796,066

FILED: MARCH 10, 2004

FOR: POLYVINYL ALCOHOL BINDER
FIBERS, AND PAPER OR NONWOVEN
FABRIC COMPRISING THEM

:

: EXAMINER: EDWARDS, NEWTON O.

:

: GROUP ART UNIT: 1774

:

DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS

ALEXANDRIA, VIRGINIA 22313

SIR:

Now comes Hideki Kamada who deposes and states:

1. That I am a graduate of Kyuusyu University and received a Master degree in chemistry in the year 1992.
2. That I have been employed by Kuraray Co., Ltd., since April 1992 in research and development of industrial goods.
3. That I am the inventor of U.S. Serial No. 10/796,066.
4. That the following experiments were carried out by me or under my direct supervision and control.

The attached Figure, which is incorporated into this Declaration by reference, shows the correlation between the degree of swelling and the water absorption. Notably, for a given value of water absorption, the degree of swelling is 100 times larger. For example, a water absorption of 5% corresponds to a degree of swelling of 500% as shown in the Figure.

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In other words, the water absorption and the degree of swelling are defined as follows.

Water absorption = $\frac{[(\text{weight after absorbing water}) - (\text{weight after drying})]}{(\text{weight after drying})} \times 100(\%)$.

Degree of swelling = $\frac{[(\text{weight after swelling}) - (\text{weight after drying})]}{(\text{weight after drying})} \times 100(\%)$.

"Swelling" is used if the rate of water absorption is comparatively low. On the contrary, "water absorption" is used if "swelling" occurs in which a material absorbs water in an amount which is several times its weight.

5. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing therefrom.

6. Further deponent saith not.

Hideki Kanada

Signature

February 17, 2005

Date

2005年 2月18日 10時30分

FEB. 15. 2005 3:39PM

2005年 2月 9日 14時17分

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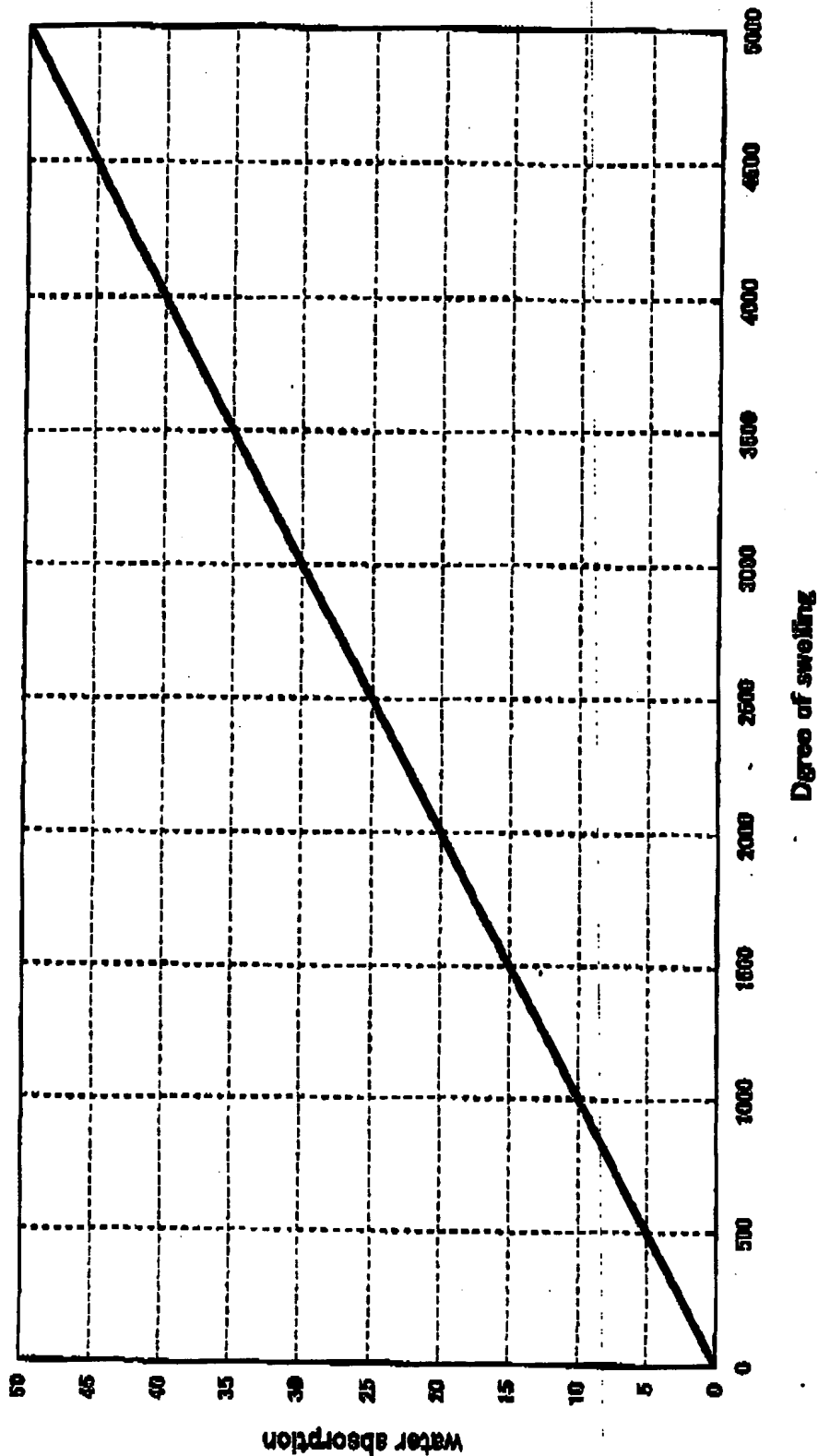
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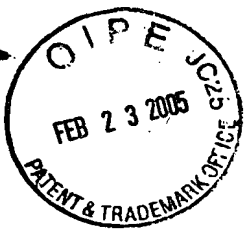
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Relationship between degree of swelling and water absorption





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[Fig.1]

